

# **UPSD BIOS ENGINEERING**

Intel Corporation, 5200 NE Elam Young Parkway Hillsboro, OR 97124-6497

**DATE:** April 8, 2005

**PRODUCT:** D865PERC/D865PESO/D848PMB/D865PCD Standard BIOS

# P18-0044 (Production 18, build 0044)

### About This Release:

- April 8, 2004
- RC86510A.86A.0044.P18.0504072049
- Core Baseline version 01.07.00
- UNDI 4.1.16 (with RPL)
- 82547EI UNDI 1.2.10

## New Fixes/Features:

- Added support for the latest processors
- Updated UNDI to build 4.1.16 (with RPL)

#### Known Errata:

• None

### Notes to Validation:

• None

# P17-0042 (Production 17, build 0042)

# About This Release:

- September 9, 2004
- RC86510A.86A.0042.P17.0409090302
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

### New Fixes/Features:

- Added S3/S4 transition workaround.
- Fixed PS/2 devices drop if user press reset button during S1
- $\bullet\$  Added support for the latest processors

### Known Errata:

• None

# P16-0039 (Production 16, build 0039)

## About This Release:

- June 24, 2004
- RC86510A.86A.0039.P16.0406241030
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

### New Fixes/Features:

- Added support for the latest processors
- Fixed system hang issue when installing certain USB Card Readers.

#### Known Errata:

• None

# P15-0037 (Production 15, build 0037)

## About This Release:

- April 22, 2004
- RC86510A.86A.0037.P15.0404221113
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

#### New Fixes/Features:

• Added support for new STMicro Flash part ID.

### Known Errata:

• None

### Notes to Validation:

• None

# P14-0036 (Production 14, build 0036)

### About This Release:

- April 12, 2004
- RC86510A.86A.0036.P14.0404121323
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

### New Fixes/Features:

• Enhanced 16-character password support by removing unnecessary reboot.

## Known Errata:

# P13-0034 (Production 13, build 0034)

### About This Release:

- April 5, 2004
- RC86510A.86A.0034.P13.0404050116
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

#### New Fixes/Features:

- Fixed the MB board Hardware Monitoring menu header cosmetic issue.
- Updated system security by increasing length of supervisor and user passwords from 7 to 16 characters by moving the storage location of user and supervisor passwords out of system CMOS and into the firmware hub.
- Added USB Disable option in BIOS Setup.
- · Added support for additional flash part manufacturers.
- $\bullet$  Correct the 82547EI UNDI version description on this release note.

#### Known Errata:

• None

### Notes to Validation:

• Due to the password length changes, user is advisable to clear the existing password before update with the new bios.

### P12-0031 (Production 12, build 0031)

### About This Release:

- March 26, 2004
- RC86510A.86A.0031.P12.0403251955
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

### New Fixes/Features:

- Added support for the latest processors
- Per TME request, added codes to detect and disable the USB UHCI controller #4 for D865PCD product.

### Known Errata:

• None

## P11-0029 (Production 11, build 0029)

#### About This Release:

- March 19, 2004
- RC86510A.86A.0029.P11.0403190123
- Core Baseline version 01.07.00
- UNDI 4.1.10 (with RPL)
- 82547EI UNDI 1.2.10

#### New Fixes/Features:

- Added D865PCD product support.
- Added RPL network boot support. Change setup option string "PXE boot to LAN" string to "Boot from Network".
- Added POST Beep Code when no video card was detected.
- Fixed hang at post code "E7" issue during memory initialization at POST with certain type of memory.
- Fixed issue where 82547EI SKU potentially hang at "AA" during first boot in manufacturing test.

#### Known Errata:

• None

# P10-0026 (Production 10, build 0026)

## About This Release:

- January 22, 2004
- RC86510A.86A.0026.P10.0401221123
- Core Baseline version 01.07.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

- · Added enhancement for Prescott CPU support.
- Fixed an issue with INT13h Function 15h returning incorrect information.
- · Fixed an issue with possible flash corruption.
- Added code to differentiate PSC P4 and PSC Celeron.
- Suppressed POST CMOS error message when force CMOS defaults option is used for Flash update.
- Fixed issue where system would not complete POST if no video card plugged
  - in and a LAN card present.
- Fixed an issue of delay in booting to Floppy with 2 SATA drives connected in native mode.
- Fixed an issue with Intel SMBUS Driver.
- Added L3 cache info in SMBios table.
- Added Prescott Microcode.

- Displayed L3 Cache option in BIOS setup if a processor with L3 Cache is in use.
- Added SMSC Heceta 6 support.
- Replaced old Intel inside logo images with new OSB SDK v2.71 images.
- Added Pentium 4 EE and Pentium 4 EE HT logo support.
- Fixed an issue where system will not wake on LAN after a Power failure.
- Updated to Baseline 07.
- Fixed issue where system would not log any events.
- Fixed an issue with an OEM manufacturing tool reporting a CMOS checksum error.

#### Known Errata:

• None

#### Notes to Validation:

• None

## P09-0024 (Production 09, build 0024)

### About This Release:

- October 14, 2003
- RC86510A.86A.0024.P09.0310141226
- Core Baseline version 01.05.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

- Fixed an issue where system will not boot to PXE when Nvidia 256 MB AGP Card is present.
- Added support for STMicro M50FW040 FWH flash part.
- Fixed an issue where the BIOS didn't load Custom Default after CMOS Corruption when using STMicro M50FW040 FWH flash part.
- Updated Setup to not to display unsupported memory slots and Zone-2 temperature.
- Updated Audio SSIDs.
- · Fixed Microcode patch update failure.
- Added support for the latest processors
- Fixed issue where the system would hang after the SpeedStep driver called the BIOS to disable BIOS controlled SpeedStep.
- Updated 865G/865PE Memory reference code to version 1.3/1.4.
- Moved BBS area from VPD block to backup block.
- Added Flash5 phase 2 and ETK Type 4 Binary supports.
- Compressed the Rex Image to free-up bootblock space. Moved Setup Client module to bootblock to free-up space for main BIOS.
- Added enhancement to flash update algorithm.
- Fixed a system hang problem during POST with ATECH Flash USB Flash card reader/writer.

- Fixed the problem where the system fan never turned off even the system temperature below thermal trip point.
- Changed display of DDR333 to DDR320 when used with a P4 800 FSB Processor.
- Fixed a system hang problem during POST with ATECH Flash USB Flash card reader/writer.
- Fixed MonitorMwait issue.
- Fixed incorrect SMBIOS type 4 Processor Upgrade info.
- · New Intel Badge Logo based on OSB SDK v2.6.
- · Corrected Prescott branding info.
- · Added support for higher current requirement processor.
- Added a workaround to boot from WinXP recovery CD.
- Fix issue where system will POST hang at 00h after setting manufacturing jumper.
- Added Prescott support.
- Updated Japanese translations.
- Changed Heceta 6 programming to support IDCC. LOCK bit is not set in BIOS.
- Added check to ignore OEM ID during recovery.
- Fixed an issue of User scan Point (BEL test F-1) was not being executed.
- Fixed an issue where Power Button override when going into S3 caused system to hang on resume.
- · Corrected some Spanish string translations.
- Added support for D848PMB and D865PERC boards.

#### Known Errata:

• None

# P08-0021 (Production 08, build 0021)

## About This Release:

- July 11, 2003
- RC86510A.86A.0021.P08.0307111407
- Core Baseline version 01.05.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

- Added functionality to flash update the BIOS in runtime using SMI without having to do a reboot to unlock the blocks.
- Added work-around for IRQ sharing issue with Ghost-7.5 in SATA native mode.
- Removed support for SafeKeeper TPM.
- Fixed an issue where system may hang when using an Unlocked Processor and CMOS is corrupt.
- Fixed issue with Maxtor SATA drive that was randomly not detected upon power cycles.
- · Fixed two potential bugs in bootblock code.
- Fixed an issue where Memtest86 utility hangs when USB legacy support is enabled.

- Added ASF support.
- Updated default Fan control setting for 865/875 product family per RPG request.
- Fixed an issue that caused a delay when booting to a floppy after attempting to boot to a non-bootable CD with two SATA drives attached.

#### Known Errata:

• None

## P07-0019 (Production 07, build 0019)

#### About This Release:

- May 19, 2003
- RC86510A.86A.0019.P07.0305191347
- Core Baseline version 01.04.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

### New Fixes/Features:

- Fixed an issue with the required module size not getting the correct value.
- Workaround for Glitch on CKE causing S3 resume failures.
- · Added manual PCI IRQ routing to the BIOS.
- Fixed issue where Windows XP legacy-to-native IDE runtime mode switching was not functioning.
- Fixed the problem where BIOS could not boot to USB Zip media when USB Zip was emulated as Floppy and the actual format of Zip media was HDD.
- Added error handling, Flash5 failed message during POST, lockdown the blocks and added increasing scale of beep tones when flash update is in progress.
- Fixed the issue, where some Springdale boards are hanging at CP-20h with CMOS battery re-installation or first power-up.
- · Changes to load uCode to BSP processor right after power-on.
- Fixed the problem where BIOS could not boot to USB Zip media when USB Zip was emulated as Floppy and the actual format of Zip media was HDD.
- Fixed missing FAN Speed menu problem. Also fixed the problem where SIO FAN TACH reading value was displayed incorrectly.
- Added Grayscale JPEG image support. Also added more robust error handling in JPEG decoder.
- Add "Additional System Information" in BIOS Setup Menu.

### Known Errata:

• None

## P06-0017 (Production 06, build 0017)

#### About This Release:

- April 23, 2003
- RC86510A.86A.0017.P06.0304231535
- Core Baseline version 01.04.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

## New Fixes/Features:

- Updated DPSD small Logo.
- Added support for Express BIOS Update 2.0.
- Added support for the latest processors

## Known Errata:

• None

#### Notes to Validation:

• None

## P05-0016 (Production 05, build 0016)

### About This Release:

- April 16, 2003
- RC86510A.86A.0016.P05.0304161810
- Core Baseline version 01.04.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

## New Fixes/Features:

- Fixed WOL from S5 issue with 82547EI LAN.
- Fixed intermittent hang at post 2A issue and fixed LAN disable issue on some SKUs.
- Fixed issue where when the floppy disabled in Setup the system still booted to the floppy after exiting/escaping the BBS Popup Menu.
- Fixed the problem where runtime GPNV Logo enable/disable feature didn't work correctly.
- Corrected ACPI S4 Sleep Type register value.

# Known Errata:

• None

# P04-0014 (Production 04, build 0014)

# About This Release:

- April 14, 2003
- RC86510A.86A.0014.P04.0304141003

- Core Baseline version 01.04.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

### New Fixes/Features:

- Added temporary workaround for C9h POST hang issue when FSB800 & DDR400 is used.
- Integrated ICH5 code with SSE BIOS Release-27.
- Fixed the problem where BIOS Hardware Health Monitor displays incorrect Fan speed.
- Fix for the Backup block string being intact when the power fails during the middle of an erase cycle.
- Fixed issue where ADC self test reported failures on Springdale-PE graphic control register (52H).
- · Added the Bus Parking feature.
- Memory Reference Code r1.20.
- Fixed issue where if first 512k memory test at post code 0d4h hangs, system will revert to auto memory setting after third reset or power cycle.
- · Fixes Setup main page display of DIMM type installed.
- Fixed issue where IRQ12 is not allocated to PCI devices if no PS/2 mouse is installed in the system and USB Legacy is disabled.
- Fixed false memory test post time error message when no failures and when dual channel optimization message needs to appear.

### Known Errata:

• None

### P03-0012 (Production 03, build 0012)

#### About This Release:

- April 04, 2003
- RC86510A.86A.0012.P03.0304041343
- Core Baseline version 01.04.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

- Lowered power consumption of 82547EI LAN when system is in S5.
- Updated ICH5 code as per ICH5bsu1.1
- Fixed USB Zip drive emulation type functionality.
- Fixed an issue with BIOS recovery from a Data CD.
- · Fixed issue of incorrect error message when using a one DIMM.
- Fixed the issues with devices changing order in the boot list or being disabled when other devices are removed.
- Added workaround for "SATA PIO mode down shift issue".
- Fixed issue where the IOI Media Bay device (USB MASS Storage device) locks the system at boot.
- 3GHz/800FSB CPU is now reported as 3GHz (No "C" Suffix).

• Added w/a for SATA COMINIT failure.

### Known Errata:

• None

# P02-0010 (Production 02, build 0010)

## About This Release:

- March 27 2003
- RC86510A.86A.0010.P02.0303271457
- Core Baseline version 01.03.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

#### New Fixes/Features:

- Fixed an issue with Gbit LAN enable/disable not working.
- Fixed WHQL HCT 11.1a Unreported Memory failures with the USB data area being at the top of physical memory.
- Fixed ICH5 related ADC self test failures.
- Cleared the IDE decode enable bit before disabling PATA/SATA (D31-  $\mathrm{F1/F2}$ ) functions.
- Corrected wake from LAN when in S5.

### Known Errata:

• None

### Notes to Validation:

• None

# P01-0007 (Production 01, build 0007)

# About This Release:

- March 16 2003
- RC86510A.86A.0007.P01.0303161400
- Core Baseline version 01.03.00
- UNDI 4.1.10
- 82547EI UNDI 1.2.10

## New Fixes/Features:

• Initial release

## Known Errata:

• None